

Solve the given system using substitution and/or elimination. Classify the system as having one solution, no solutions, or infinite solutions. Check your answer both algebraically and graphically.

$$\begin{cases} \frac{2}{3}x - \frac{1}{5}y = 3 \\ \frac{1}{2}x + \frac{3}{4}y = 1 \end{cases}$$

**Exercise 1** Classify this system as having one solution, no solutions, or infinite solutions.

**Multiple Choice:**

- (a) one solution ✓
- (b) no solutions
- (c) infinite solutions

**Exercise 1.1** The solution to this system is  $\left(\boxed{\frac{49}{12}}, \boxed{-\frac{25}{18}}\right)$ .